

**REMARKS**

This is in full and timely response to the final Office Action dated August 10, 2005. The present Amendment amends claims 5 and 14 and cancels claim 13 in order to further clarify a portion of the scope sought to be patented, and otherwise disputes certain findings of fact made in connection with the rejection of the claims. Support for these amendments can be found variously throughout the specification, including, for example, original claim 13. No new matter has been added. Accordingly, claims 5, 8-12, and 14-19 are presently pending in the application, each of which is believed to be in condition for allowance. Reexamination and reconsideration in light of the present Amendment and the following remarks are respectfully requested.

Entry of this Amendment is proper under 37 C.F.R. §1.116 since the amendment: (a) places the application in condition for allowance (for the reasons discussed herein); (b) does not raise any new issues requiring further search and/or consideration; (c) satisfies a requirement of form asserted in the previous Office Action; and (d) places the application in better form for appeal, should an appeal be necessary. The amendment is necessary and was not earlier presented because it is made in response to arguments raised in the final rejection. Entry of this amendment is respectfully requested. Reexamination and reconsideration in light of the above amendments and the following remarks are respectfully requested.

**Claim Rejections- 35 U.S.C. § 112**

In the Action, claims 5 and 8-19 were rejected under 35 U.S.C. § 112, first paragraph, for alleged failure to comply with the written description requirement. In order to expedite prosecution, claim 5 has been amended in accordance with the examiner's suggested amendments. Claim 5 now indicates that the disclosed components are contained in and amount of 0.5 to 10 wt%, as supported by the original disclosure (page 16, lines 16-22) Withdrawal of this rejection is therefore courteously solicited.

**Claim Rejections- 35 U.S.C. § 102**

In the Action, claims 5, 8-10, and 12 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Takayama '549 et al. (U.S. Patent No. 5,948,549).

Additionally, claims 5, 9, and 12 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Takayama '121 et al. (U.S. Patent No. 6,613,121). This rejection is respectfully traversed.

Independent claim 5 as amended recites, *inter alia*, a copper based sintered contact material containing 12 to 16 wt% Sn and a Cu-Sn compound phase which is dispersedly precipitated in the structure thereof.

In contrast Takayama '549 discloses a copper based sintered contact material containing Sn in an amount up to 10 wt%. Additionally, Takayama '121 arguably discloses a copper based sintered contact material containing Sn in an amount between 1 and 12 wt%. However, both Takayama '549 and Takayama '121 fail to disclose, teach, or even suggest a contact material containing 12 to 16 wt % Sn and a Cu-Sn compound phase dispersedly precipitated in the structure.

Accordingly, because Takayama '549 fails to disclose, teach or suggest each and every limitation of claim 5, a *prima facie* anticipation rejection has not been established, and withdrawal of this rejection is respectfully requested. *See, e.g., Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference"). *See also Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1566 (Fed. Cir. 1989) ("The identical invention must be shown in as complete detail as is contained in the ... claim.").

Moreover, aside from the novel limitations recited therein, claims 8-10 and 12, being dependent either directly or indirectly upon allowable base claim 5, are also allowable at least by virtue of their dependency upon allowable claim 5. Withdrawal of the rejection of these claims is therefore courteously solicited.

#### **Claim Rejections- 35 U.S.C. § 103**

In the Action, claims 13-19 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Takayama '549 et al. Additionally, claim 11 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Takayama '549 et al. in view of Takayama '775 et al. (U.S. Patent No. 6,015,775). This rejection is respectfully traversed.

The subject matter of claim 13 has been incorporated into independent claim 5, and claim 13 has been canceled with this amendment. Independent claim 5 now recites, *inter alia*, and copper based sintered contact material containing 12 to 16 wt% Sn and a Cu-Sn compound phase which is dispersedly precipitated in the structure thereof.

As noted by the Examiner, Takayama '549 does not disclose or suggest a contact material containing 12 to 16 wt% Sn and a Cu-Sn compound phase; Takayama '549 merely discloses Sn in a maximum quantity of 10 wt%. Further, the claimed range of 12 to 16 wt% Sn yields a significant increase in bondability of the copper based sintered contact material relative to the iron based material, while also causing precipitation of Cu-Sn  $\delta$  phase intermetallic compounds in the grain boundaries upon cooling (Page 14, lines 14-26). The precipitated Cu-Sn intermetallics restrain extendibility of the sintered contact and significantly alleviate agglutination. As indicated in the disclosure (Page 14, line 26 through page 15, line 7) the precipitation of the Cu-Sn intermetallic compounds in the grain boundaries leads to characteristics particularly important for contacts used in applications such as cylinder blocks for hydraulic pumps and motors (where the sliding contact occurs in a centrifugal whirling manner). The characteristics are unexpectedly obtained with the higher range of Sn (12-16 wt%), which is not even indicated as being desirable in Takayama '549. In fact Takayama '549 teaches only that a  $\beta$  phase intermetallic is obtained when using Sn in the range disclosed (not more than 10 wt%). Thus the range of 12-16 wt% Sn as claimed yields a distinct composition with unexpected characteristics, as shown by the resulting  $\delta$  phase intermetallic compound which is precipitated in the grain boundaries.

Accordingly, because Takayama '549 fails to disclose, teach or suggest each and every limitation of claim 5, a *prima facie* case of obviousness has not been established, and withdrawal of this rejection is respectfully requested. See, e.g., *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); accord. MPEP 2143.03.

Moreover, aside from the novel limitations recited therein, claims 11, and 14-19, being dependent either directly or indirectly upon allowable base claim 5, are also allowable at least by virtue of their dependency upon allowable claim 5. Withdrawal of the rejection of these claims is therefore courteously solicited.

**CONCLUSION**

For at least the foregoing reasons, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the examiner is respectfully requested to pass this application to issue. If the examiner has any comments or suggestions that could place this application in even better form, the examiner is invited to telephone the undersigned attorney at the below-listed number.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. KOM-153/INO/DIV1 from which the undersigned is authorized to draw.

Dated:

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Respectfully submitted,

By

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